

The Claims

1-12. (Canceled).

13. (Currently amended) One or more computer readable media having stored thereon a plurality of instructions that, when executed by a transformation engine, causes the transformation engine to:

access a plurality of constructs in an application programming interface description, wherein the description is written in an extensible markup language (XML) format; and

transform each of the plurality of constructs into computer executable instructions and declarations for a component object module (COM) application programming interface header file, wherein to transform one or more of the plurality of constructs is to:

check an attribute of a declare enumeration construct of the plurality of constructs to determine whether the declare enumeration construct is to be transformed into a series of manifest constants or into a component object model enumeration declaration; and

transform the declare enumeration construct into the component object model enumeration declaration if the attribute has a first value, and otherwise transform the declare enumeration construct into the series of manifest constants.

14. (Original) One or more computer readable media as recited in claim 13, wherein the transformation engine comprises a series of instructions executed by one or more processors.

15. (Canceled).

16. (Canceled).

17. (Canceled).

18. (Original) One or more computer readable media as recited in claim 13, wherein the plurality of instructions include instructions to transform a declare function construct into a component object model function declaration.

19. (Original) One or more computer readable media as recited in claim 13, wherein the plurality of instructions include instructions to transform a declare class object construct into a component object model class object ID declaration.

20. (Original) One or more computer readable media as recited in claim 13, wherein the plurality of instructions include instructions to transform a declare interface construct into a component object model forward class declaration.

21. (Original) One or more computer readable media as recited in claim 13, wherein the plurality of instructions include instructions to transform a declare data structure construct into a component object model data structure declaration.

22. (Original) One or more computer readable media as recited in claim 13, wherein the plurality of instructions include instructions to transform a declare macro construct into a component object model manifest constant.

23-37. (Canceled).

38. (Currently amended) A computer-readable medium having stored thereon a data structure comprising:

an id attribute field that contains data identifying an application programming interface description construct;

a plurality of construct fields that contain data describing the application programming interface, wherein the data describing the application programming interface is to be transformed into computer executable instructions and declarations of a header file of the application programming interface, wherein the plurality of construct fields include one or more declare enumeration construct fields, and wherein each declare enumeration construct field includes:

a plurality of declare enumeration member constructs, and

an enumeration flag attribute that is set to a first value to indicate that the plurality of declare enumeration member constructs are to be transformed into a series of manifest constants, and that is set to a second

value to indicate that the plurality of declare enumeration member constructs are to be transformed into a component object model enumeration declaration; and

a field functioning to identify the end of the data structure.

39. (Canceled).

40. (Canceled).

41. (Original) A computer-readable medium as recited in claim 38, wherein the plurality of construct fields include one or more declare function construct fields.

42. (Original) A computer-readable medium as recited in claim 38, wherein the plurality of construct fields include one or more declare class object construct fields.

43. (Original) A computer-readable medium as recited in claim 38, wherein the plurality of construct fields include one or more declare interface construct fields.

44. (Original) A computer readable media as recited in claim 43, wherein each declare interface construct field includes:

one or more declare method constructs, wherein each declare method construct stores data identifying a method corresponding to the interface defined by the declare interface construct field; and

wherein each declare method construct includes one or more declare parameter construct fields, wherein each declare parameter construct field stores data identifying a parameter of the method.

45. (Original) A computer-readable medium as recited in claim 38, wherein the plurality of construct fields include one or more declare data structure construct fields.

46. (Original) A computer-readable medium as recited in claim 38, wherein the plurality of construct fields include one or more declare macro construct fields.

47. (Previously presented) A computer-readable medium as recited in claim 38, wherein a component object module (COM) application programming interface header file is to be generated for the application programming interface by transforming the data in the plurality of construct fields.

48. (Previously presented) One or more computer readable media as recited in claim 13, wherein the COM application programming interface header file comprises a C/C++ header file.

49. (New) A method, implemented in a computing device, the method comprising:

accessing a plurality of constructs in an application programming interface description, wherein the description is written in an extensible markup language (XML) format; and

transforming each of the plurality of constructs into computer executable instructions and declarations for a component object module (COM) application programming interface header file, wherein transforming one or more of the plurality of constructs comprises:

checking an attribute of a declare enumeration construct of the plurality of constructs to determine whether the declare enumeration construct is to be transformed into a series of manifest constants or into a component object model enumeration declaration; and

transforming the declare enumeration construct into the component object model enumeration declaration if the attribute has a first value, and otherwise transforming the declare enumeration construct into the series of manifest constants.

50. (New) A method as recited in claim 49, wherein transforming at least one of the plurality of constructs comprises transforming a declare function construct into a component object model function declaration.

51. (New) A method as recited in claim 49, wherein transforming at least one of the plurality of constructs comprises transforming a declare class object construct into a component object model class object ID declaration.

52. (New) A method as recited in claim 49, wherein transforming at least one of the plurality of constructs comprises transforming a declare interface construct into a component object model forward class declaration.

53. (New) A method as recited in claim 49, wherein transforming at least one of the plurality of constructs comprises transforming a declare data structure construct into a component object model data structure declaration.

54. (New) A method as recited in claim 49, wherein transforming at least one of the plurality of constructs comprises transforming a declare macro construct into a component object model manifest constant.

55. (New) A computing device comprising:
a processor; and
one or more computer readable media having stored thereon instructions that, when executed by the processor, cause the processor to:

access a plurality of constructs in an application programming interface description, wherein the description is written in an extensible markup language (XML) format; and

transform each of the plurality of constructs into computer executable instructions and declarations for a component object module (COM) application programming interface header file, wherein to transform one or more of the plurality of constructs is to:

check an attribute of a declare enumeration construct of the plurality of constructs to determine whether the declare enumeration construct is to be transformed into a series of manifest constants or into a component object model enumeration declaration; and

transform the declare enumeration construct into the component object model enumeration declaration if the attribute has a first value, and otherwise transform the declare enumeration construct into the series of manifest constants.

56. (New) A computing device as recited in claim 55, wherein the instructions include instructions to transform a declare function construct into a component object model function declaration.

57. (New) A computing device as recited in claim 55, wherein the instructions include instructions to transform a declare class object construct into a component object model class object ID declaration.

58. (New) A computing device as recited in claim 55, wherein the instructions include instructions to transform a declare interface construct into a component object model forward class declaration.

59. (New) A computing device as recited in claim 55, wherein the instructions include instructions to transform a declare data structure construct into a component object model data structure declaration.

60. (New) A computing device as recited in claim 55, wherein the instructions include instructions to transform a declare macro construct into a component object model manifest constant.